

## ABSTRACT OF THE DISCLOSURE

A computer readable medium includes computer executable code stored thereon, the code for estimating power consumption of an integrated circuit, comprising code for simulating logic of basic and mega cells of the integrated circuit, code for  
5 estimating a current consumed by the mega cells by obtaining logic states for each mega cell, determining an average operation frequency for each logic state, and determining an alternating current component and a direct current component for each logic state to calculate said current consumed by the mega cells for estimating a first value of electric power consumed by said mega cells based on said logic simulations and pre-established power consumption data, code for estimating a current consumed by the basic cells for  
10 estimating a second value of electric power consumed by said basic cells based on said logic simulations and pre-established power consumption data and code for combining said first and second values to obtain the power consumption of the integrated circuit.